MTP U Series

UNIVERSAL MTP TWISTED PAIR RECEIVERS

- Compatible with all MTP Series twisted pair products
- Automatically routes incoming UTP signal to appropriate video, audio, and RS-232 connector
- Supports RGBHV, RGBS, RGsB, RsGsBs, component video, S-video, and composite video
- Compatible with HDTV component video, bi-level or tri-level sync
- Separate variable RGB level and peaking controls
- Independent skew adjustments for each color – SEQ models only
- Versatile mounting options
- External international power supply included
- CAT 7 STP cable version available with MTP C7 U RSA SEQ model

MTP U R A

MTP U R RS

MTP U R RSA SEQ

The MTP U Series Universal Receivers accept a wide range of video formats, along with RS-232 or audio signals, on a single CAT 5-type cable. When used with Extron MTP switchers and matrix switchers, MTP U Series receivers eliminate the need for multiple receiver units and multiple cables per display, and dramatically reduce the number of switcher outputs required. When paired with the MTP U T A D Universal Transmitter, they provide dramatic cost savings, design flexibility, and superior performance in complex twisted pair switching and matrix switching applications.

DESCRIPTION

The Extron **MTP U Series** Universal Mini Twisted Pair Receivers accept a wide variety of video formats along with RS-232 or audio signals on a single CAT 5-type cable, providing dramatic cost savings with superior performance in complex twisted pair switching applications. With advanced features, including the ability to automatically route the incoming MTP signal to the appropriate video, audio, and RS-232 output connector, systems require only one receiver, one CAT 5 cable, and one matrix switcher output for each display.

MTP U Series universal receivers are fully compatible with all Extron MTP Series twisted pair products, including the MTPX and MTPX Plus Series Twisted Pair Matrix Switchers and all MTP Series transmitters, including the MTP U T A D Universal Twisted Pair Transmitter. The compact units can fit just about anywhere: in an equipment rack, under a table, or near a display.

Automatic Signal Format Detection

MTP U Series universal receivers automatically detect the incoming video signal format, as well as any incoming audio or RS-232 control signal. The incoming signals are then routed to the appropriate output connectors. Only one video output connector will be active at any time. The other video connectors are muted. This is ideal for applications that use display devices set to auto detect mode.

Next Generation of Twisted Pair Integration

When used with Extron switchers and transmitters, including the MTP U T A D Universal Twisted Pair Transmitter, MTP U Series universal receivers facilitate system integration, saving time and money and eliminating many of the headaches normally encountered with other twisted pair solutions.

FEATURES

- **Compatible with all Extron MTP Series Twisted Pair products**
- **Automatically routes incoming UTP signal to appropriate video, audio, and RS-232 connector**
- **Supports RGBHV, RGBS, RGsB, RsGsBs, component video, S-video, and composite video**
- **Compatible with HDTV component video, bi-level or tri-level sync**
- **Separate variable level and peaking controls**
- **Independent skew adjustments for each color, SEQ models only**
- **Versatile mounting options**
- **External international power supply included**

MODELS

MTP U R A

Universal MTP – Mini Twisted Pair Receiver for Video and Audio

- UTP input: Accepts video and audio signals
- Video output: Composite on BNC, S-video on 4-pin mini DIN, component and computer-video on 15-pin HD

MTP U R RS

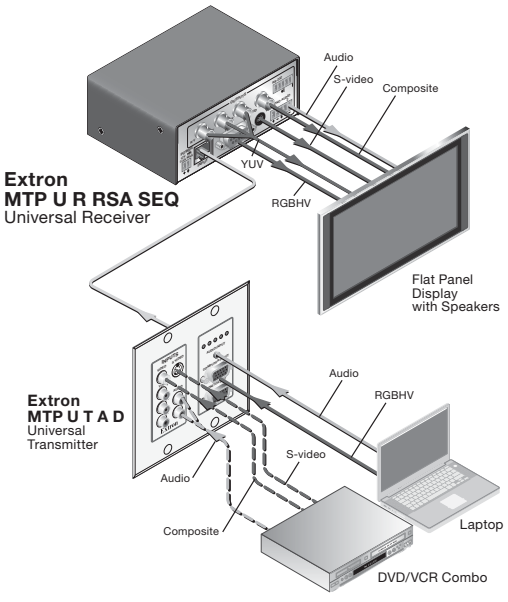
Universal MTP – Mini Twisted Pair Receiver for Video and RS-232

- UTP input: Accepts video and bidirectional RS-232 control signals
- Video output: Composite on BNC, S-video on 4-pin mini DIN, component and computer-video on 15-pin HD

MTP U R RSA SEQ

Universal MTP – Mini Twisted Pair Receiver for Video, Audio, and RS-232 with Skew Equalization

- UTP input: Accepts video with audio or video with bidirectional RS-232 control signals
- Video output: Composite on BNC, S-video on 4-pin mini DIN, component on three BNCs, and computer-video on 15-pin HD
- Independent skew equalization for each color
- MTP C7 U R RSA SEQ model available for use with CAT 7 cable only and requires a C7 type transmitter



VIDEO

Gain ..... Unity

VIDEO INPUT

Number/signal type ..... 1 set of proprietary analog signals
Connectors ..... 1 female RJ-45

VIDEO OUTPUT

Number/signal type ..... 1 RGBHV, RGBS, component video (bi-level and tri-level), S-video, composite video (follows input type)
Connectors
MTP U R RSA SEQ, MTP C7 U R RSA SEQ ..... 1 female 15-pin HD for RGB
3 BNC female for Y, R-Y, B-Y
(1) 4-pin mini DIN for S-video (Y/C)
1 BNC female for composite video
All other models ..... 1 female 15-pin HD for RGB or Y, R-Y, B-Y
(1) 4-pin mini DIN for S-video (Y/C)
1 BNC female for composite video
Nominal level ..... 1 Vp-p for Y of component video and S-video, and for composite video
0.7 Vp-p for RGB and for R-Y and B-Y of component video
0.3 Vp-p for C of S-video
Minimum/maximum levels ..... 0.8 V to 1.2 Vp-p
Impedance ..... 75 ohms (during video output only)
Return loss ..... <-30 dB @ 5 MHz (during video output only)
DC offset ..... <±20 mV with input at 0 offset
Maximum resolution 1920x1200
NOTE: Refer to the user's manual for the maximum distances recommended for specific resolutions.

SYNC

Output type ..... RGBHV, RGBS
Standards ..... NTSC 3.58, NTSC 4.43, PAL, SECAM
Output level ..... 4.0 V to 5.0 Vp-p, unterminated
Output impedance ..... 87 ohms (24 mA)
Polarity ..... Positive or negative (selectable)

AUDIO — MTP U R RSA SEQ, MTP U R A, MTP C7 U R RSA SEQ

Gain ..... Unbalanced output: 0 dB; balanced output: +6 dB
Frequency response ..... 20 Hz to 20 kHz, ±1 dB
THD + Noise ..... 0.15% @ 1 kHz, 0.3% @ 20 kHz at nominal level
S/N ..... >70 dB at maximum output (unweighted)

AUDIO INPUT — SEE MTP SERIES TRANSMITTERS' AUDIO OUTPUT SPECIFICATIONS

Number/signal type ..... 1 set of proprietary analog signals
Connectors ..... 1 female RJ-45
NOTE: 0 dBu = 0.775 Vrms, 0 dBV = 1 Vrms, 0 dBV ≈ 2 dBu

AUDIO OUTPUT — MTP U R RSA SEQ, MTP U R A, MTP C7 U R RSA SEQ

Number/signal type ..... 2 mono, balanced/unbalanced
Connectors ..... (1) 3.5 mm captive screw connector, 5 pole
Impedance ..... 50 ohms unbalanced, 100 ohms balanced
Gain error ..... ±1 dB channel to channel

CONTROL/REMOTE — RS AND RSA MODELS

Serial control port input/output .. RS-232 via (1) 3.5 mm, 3 pole captive screw connector
NOTE: The serial communications link of an MTP U R RSA SEQ, MTP U R RS SEQ, MTP C7 U R RS SEQ, or MTP U R RS is bidirectional (default), **unless** the receiver's internal jumper JMP 1 is set to unidirectional.

Set up the receiver for unidirectional communication when it is to be used with an MTP DA to avoid any RS-232/audio detection issues.

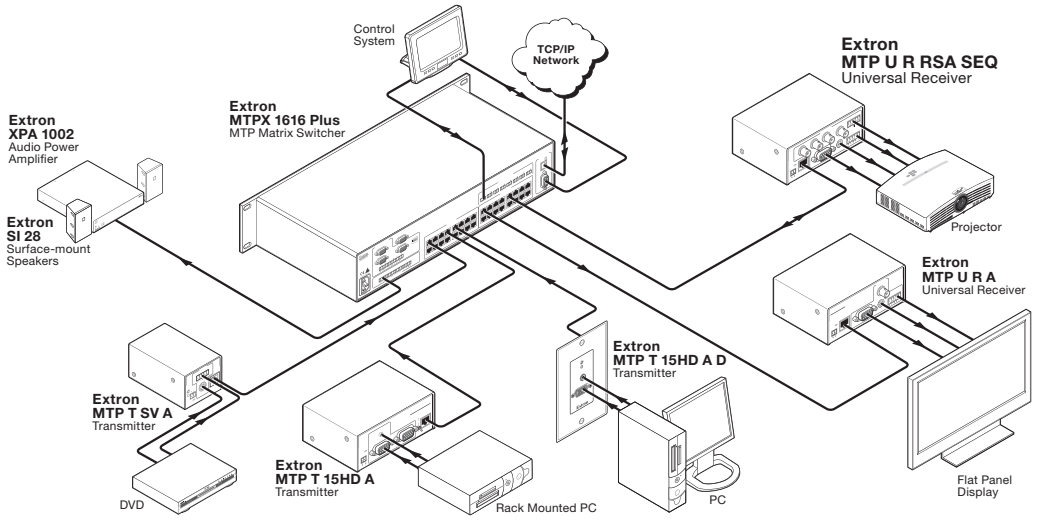
When used with an MTPX matrix switcher, set up the receiver for unidirectional transmitter-to-receiver communication; otherwise it should be set to bidirectional when using the RS-232 output insert connections on the matrix.
Baud rates ..... Up to 38400 bps at up to 600' (183 m) (Higher data rates and distances are possible.
Performance varies based on baud rate and cable length.)
Protocol ..... Data bits = 5 - 8
Stop bits = 1 or 2
Parity = odd, even, none
Flow control = XON, XOFF, none
NOTE: Protocol is mirrored between the transmitter and the receiver.
Serial control pin configurations .. Captive screw connectors: 1 = TX, 2 = RX, 3 = GND

GENERAL

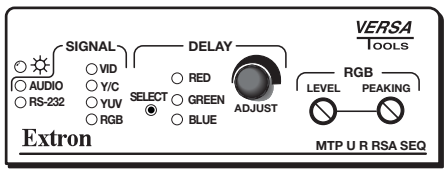
Recommended cable type
MTP C7 U R RSA SEQ ..... CAT 7 (shielded)
All other models ..... CAT 5/5e/6 (shielded or unshielded)
External power supply ..... 100 VAC to 240 VAC, 50-60 Hz, external; to 12 VDC, 2 A, regulated
Power input requirements ..... 12 VDC, 0.5 A
Temperature/humidity ..... Storage: -40 to +158 ˚F (-40 to +70 ˚C) / 10% to 90%, noncondensing
Operating: +32 to +122 ˚F (0 to +50 ˚C) / 10% to 90%, noncondensing
Cooling ..... Convection, vents on top and sides
Mounting
Rack mount ..... Yes, with optional 1U, 9.5" deep rack shelf (RSU 129, #60-190-01; RSB 129, 60-604-01); 1U, 6" deep rack shelf (RSU 126, #60-190-10; RSB 126, 60-604-10); or VersaTools® 1U, 3.5" deep rack shelf (RSF 123, #60-190-20; RSB 123, 60-604-20)
Furniture mount ..... Yes, with optional Mini Under-Desk Mounting Kit, part #70-212-01 (MBU 123)
Pole mount ..... Yes, with optional projector mounting kit, part #70-217-01 (PMK 100)
Enclosure type ..... Metal
Enclosure dimensions ..... 1.7" H x 4.3" W x 3.0" D (1U high, quarter rack wide)
(4.3 cm H x 10.9 cm W x 7.6 cm D)
(Depth excludes connectors.)
Product weight ..... 0.6 lbs (0.3 kg)
Shipping weight ..... 2 lbs (1 kg)
Vibration ..... ISTA 1A in carton (International Safe Transit Association)
Regulatory compliance
Safety ..... CE, CUL, UL
EMI/EMC ..... CE, C-tick, FCC Class A, ICES, VCCI
MTBF ..... 30,000 hours
Warranty ..... 3 years parts and labor
NOTE: All nominal levels are at ±10%.

Model	Version Description	Part number
MTP U R RSA SEQ	VGA, Video, Audio & RS-232 w/Skew EQ	60-869-01
MTP C7 U R RSA SEQ	VGA, Video, Audio & RS-232 w/Skew EQ	60-1016-01
MTP U R A	Video & Audio Universal Receiver	60-869-03
MTP U R RS	VGA, Video & RS-232	60-869-04

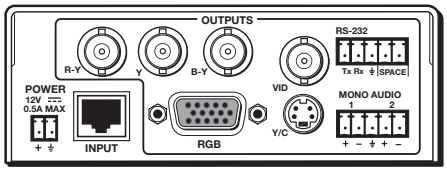
APPLICATION DIAGRAM


Control System
TCP/IP Network
Extron MTP U R RSA SEQ Universal Receiver
Extron MTPX 1616 Plus MTP Matrix Switcher
Extron XPA 1002 Audio Power Amplifier
Extron SI 28 Surface-mount Speakers
Projector
Extron MTP U R A Universal Receiver
Extron MTP T 15HD A D Transmitter
Extron MTP T SV A Transmitter
Extron MTP T 15HD A Transmitter
DVD
Rack Mounted PC
PC
Flat Panel Display

PANEL DRAWINGS



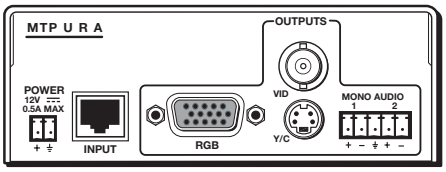
MTP U R RSA SEQ - Front



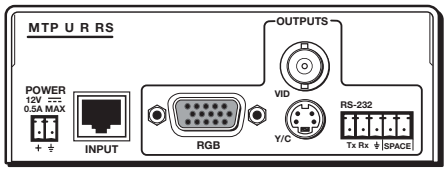
MTP U R RSA SEQ - Back

MTP U R A - Front

MTP U R RS - Front



MTP U R A - Back



MTP U R RS - Back

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